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**5-13 $\mu$ m AIRBORNE OBSERVATIONS OF COMET WILSON 1986e:  
PRELIMINARY RESULTS**

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**ABSTRACT**

Comet Wilson was observed from the Kuiper Airborne Observatory approximately April 23.6 and 25.6, 1987, UT ( $\approx 3$  and 5 days after perihelion) using the NASA-Ames Faint Object Grating Spectrometer. Spectrophotometric data were obtained with a 21" aperture ( $\approx 10,000$  km at the comet) between 5 and 13 $\mu$ m and with a spectral resolution of 50-100. Spectra of the inner coma and nucleus reveal a fairly smooth continuum with little evidence of silicate emission. The 5-8 $\mu$ m color temperature of the comet was  $300 \pm 15$  K, approximately 15 percent higher than the equilibrium blackbody temperature. All three spectra of the nucleus show a new emission feature at  $\approx 12.25\mu\text{m} \approx$  two channels (.22 $\mu\text{m}$ ) wide. Visual and photographic observations made during the time of these observations showed a broad faint, possibly two-component tail. No outburst activity was observed.

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